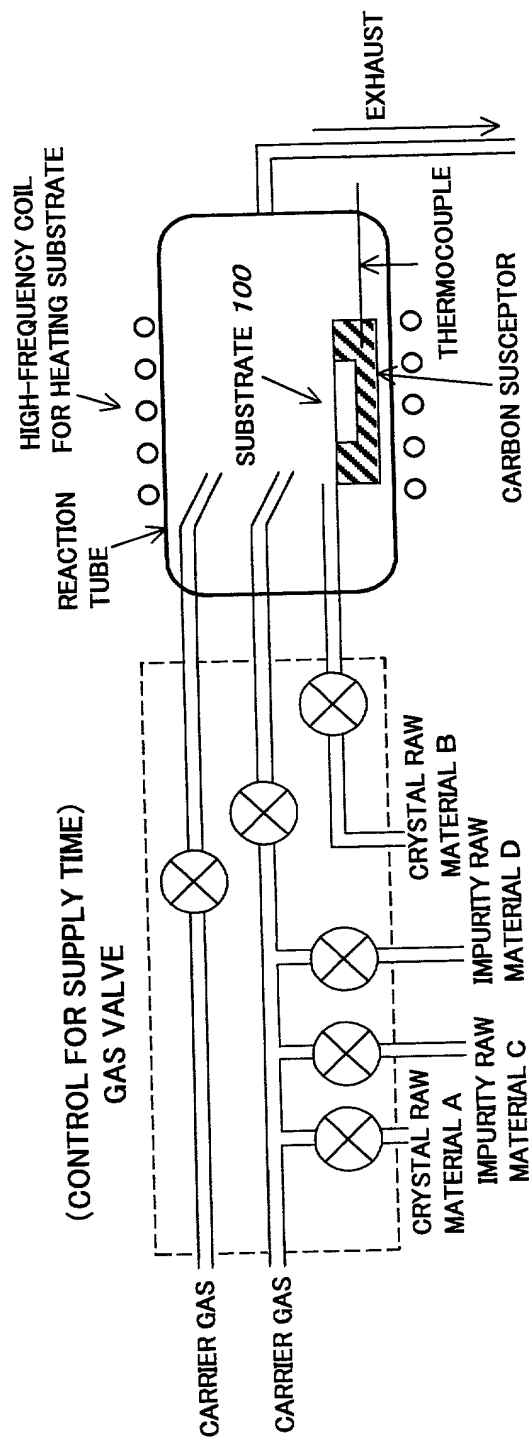
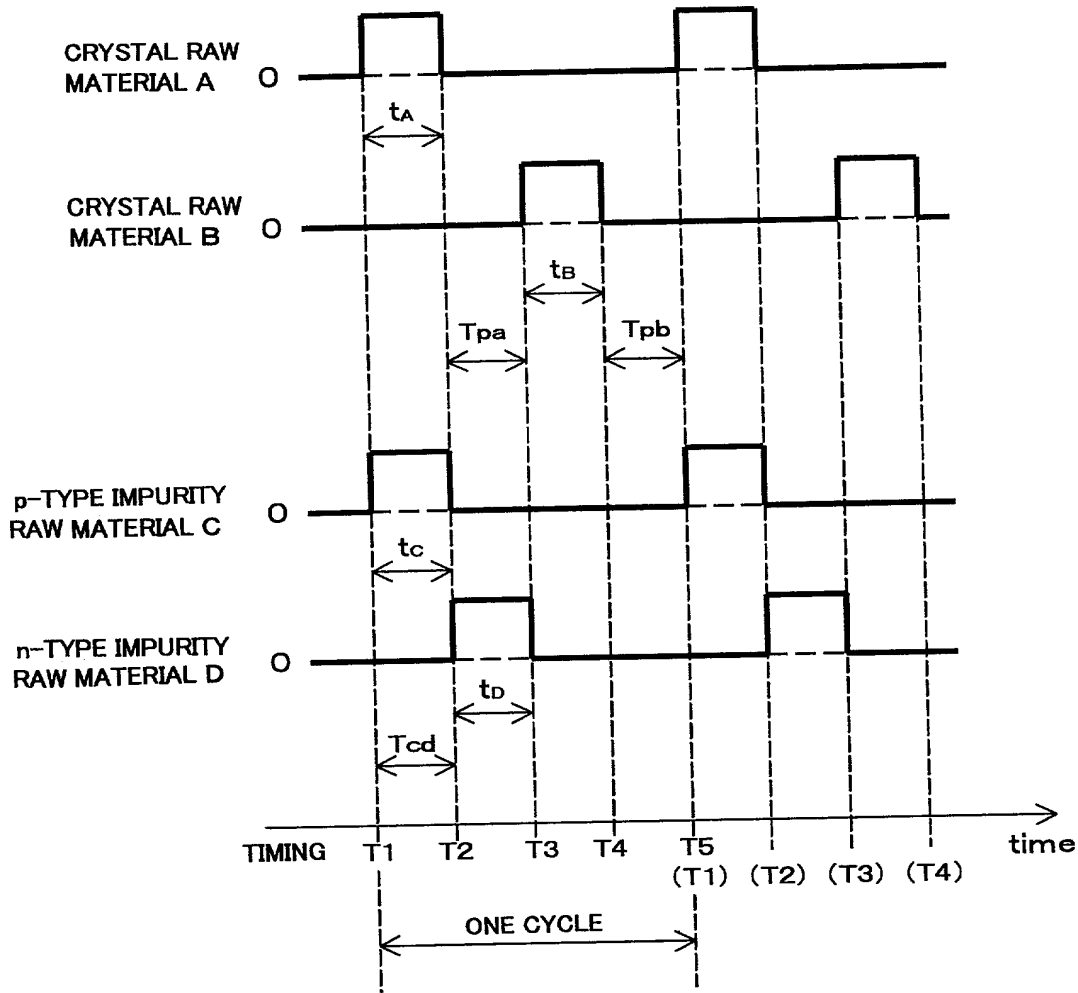


FIG. 1



# FIG. 2

SEQUENCE OF PULSE FOR RAW MATERIAL SUPPLY



**SECRET**

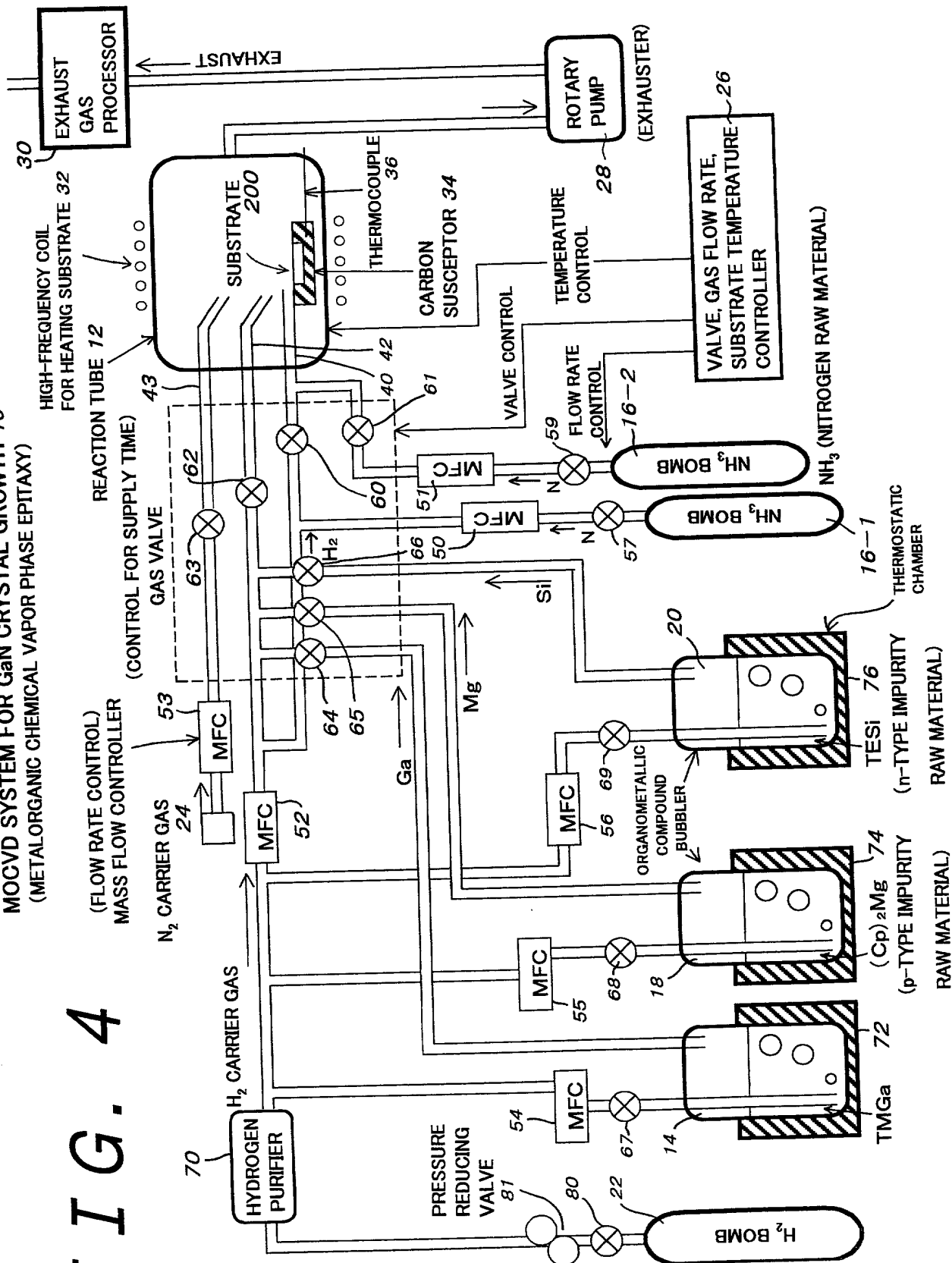
2



**SECRET**

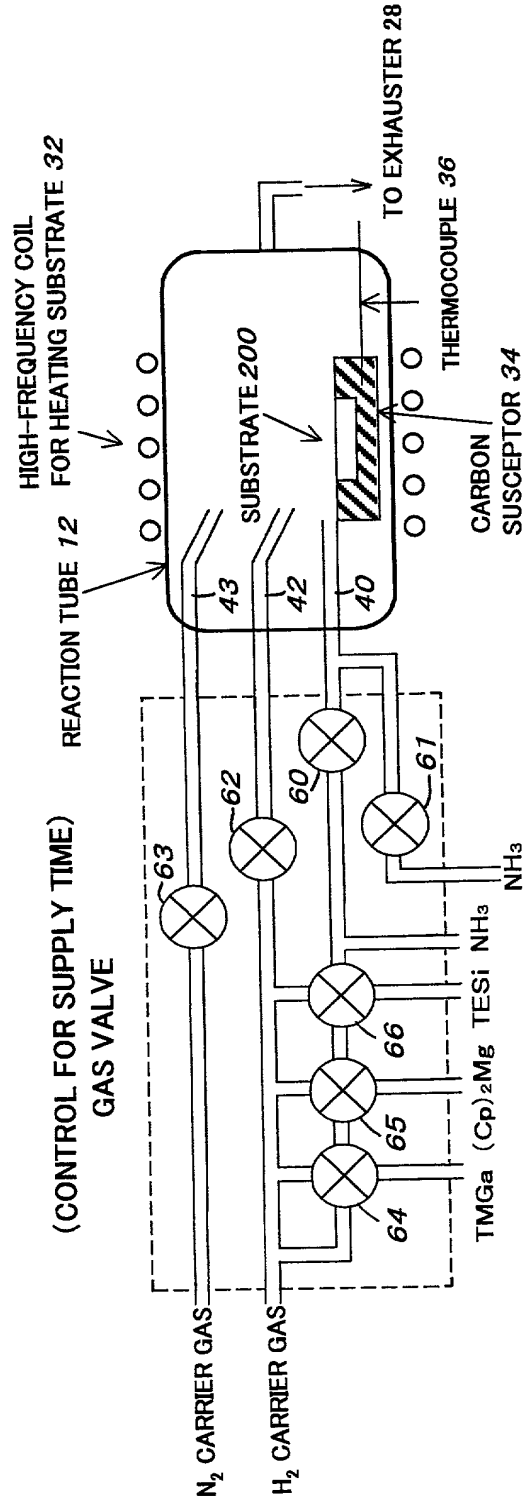
**MOCVD SYSTEM FOR GaN CRYSTAL GROWTH 10**  
(METALORGANIC CHEMICAL VAPOR PHASE EPITAXY)

**FIG. 4**

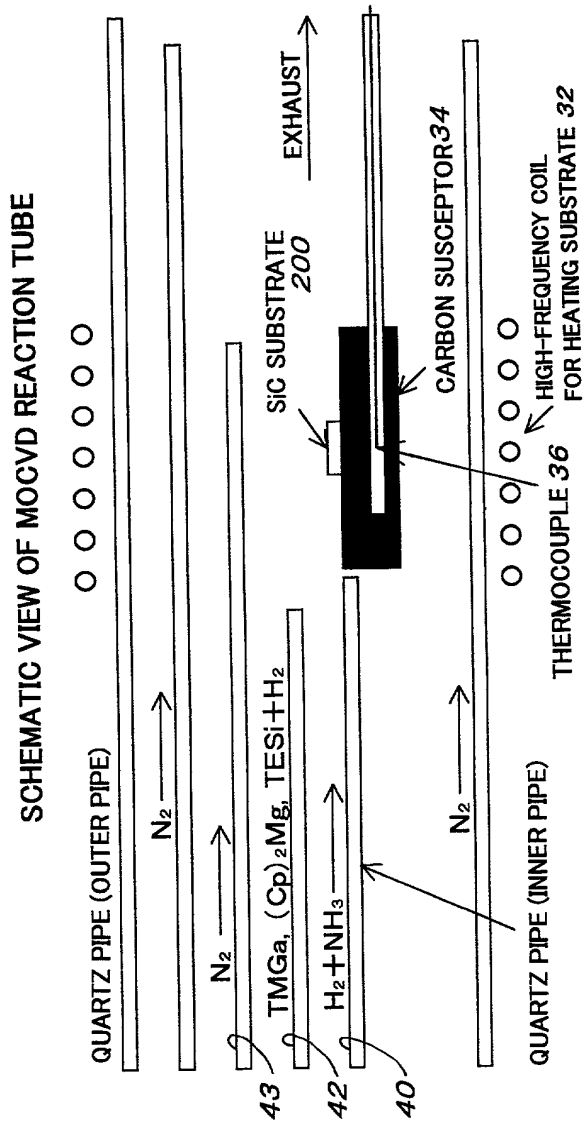


# FIG. 5

MOCVD SYSTEM 10  
(METALORGANIC CHEMICAL VAPOR PHASE EPITAXY)



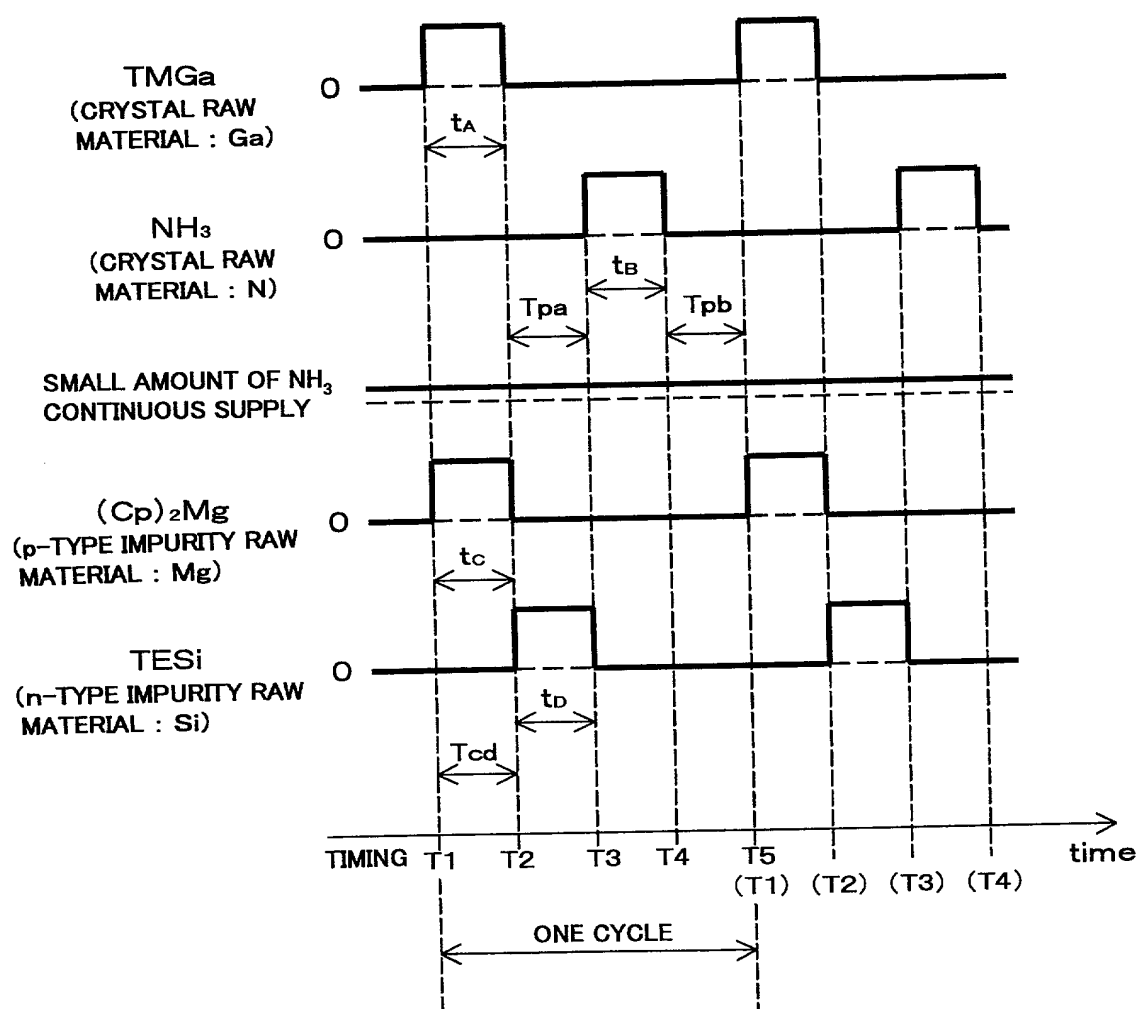
# FIG. 6



(GROWTH CONDITION)  
 PRESSURE IN REACTION TUBE : 76Torr,  
 SUBSTRATE TEMPERATURE : 950~1, 150°C

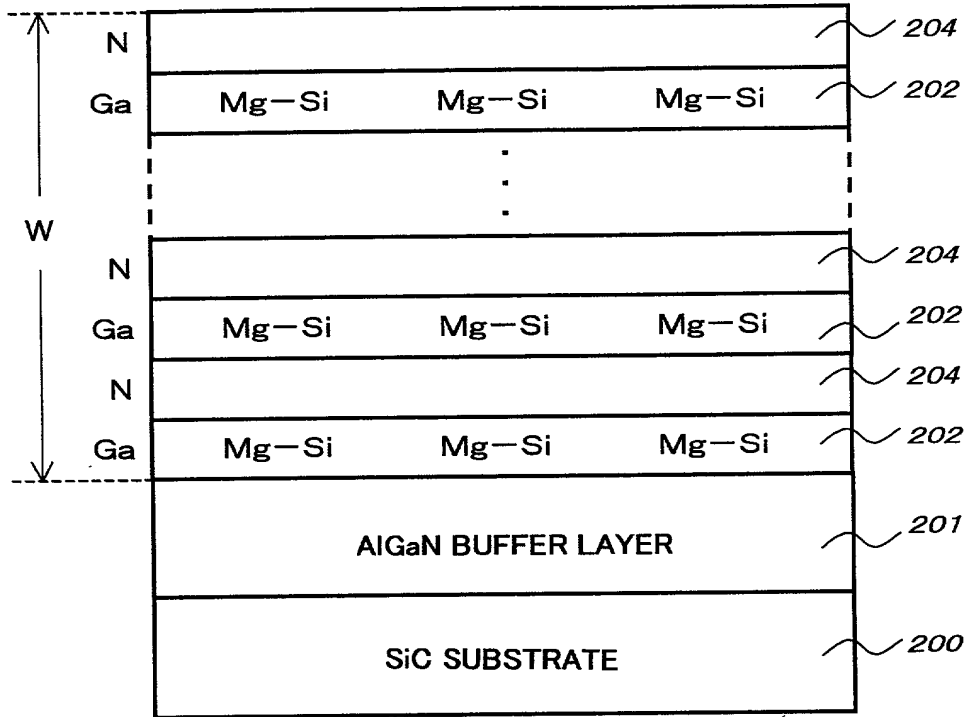
H<sub>2</sub> GAS FLOW RATE : TWO TO FIVE LITER/MINUTE  
 N<sub>2</sub> GAS FLOW RATE : ONE TO THREE LITER/MINUTE  
 NH<sub>3</sub> GAS FLOW RATE : ONE LITER/MINUTE

### SEQUENCE OF PULSE FOR RAW MATERIAL SUPPLY



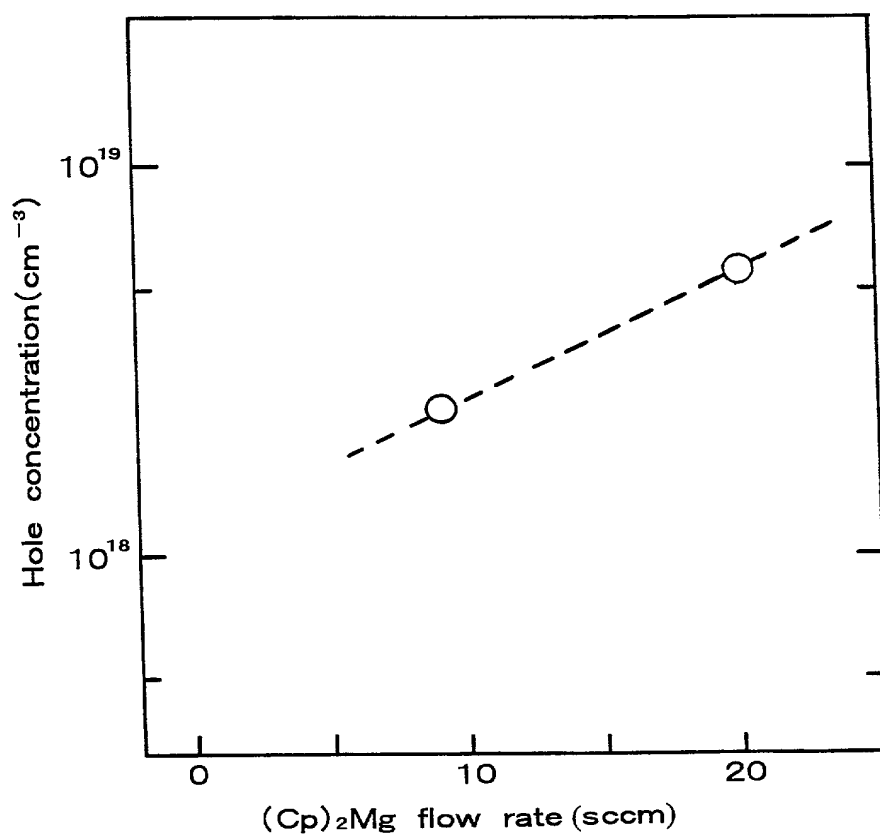
# FIG. 8

SCHEMATIC VIEW SHOWING SECTION OF GaN CRYSTAL ALLOWED TO GROW BY SIMULTANEOUS DOPING OF Mg AND Si



# FIG. 9

POSITIVE HOLE CONCENTRATION OF p-TYPE GaN TO  
SUPPLY FLOW RATE OF Mg RAW MATERIAL



# FIG. 10

POSITIVE HOLE CONCENTRATION OF p-TYPE GaN TO  
SUPPLY FLOW RATE OF Si RAW MATERIAL IN CASE OF  
SIMULTANEOUS SUPPLY OF Mg AND Si RAW MATERIALS

